

Remarks

Claims 14-23 are pending in this application prior to entry of the above-amendments. Claims 14-23 are currently amended. Reconsideration is requested in light of the amendments above and below remarks.

The present instrument relates to an orthotic device suitable for use as a ligament shim.

The Examiner has objected to claims 16 & 17 as being unclear with respect to "the other of said at least one surface being arc shaped. Claims 16 and 17, among others, have been amended to refer to a first surface and a second surface in order to clarify the claims. Reconsideration is urged. No new matter has been added.

The Examiner has also rejected claim 14 as anticipated by Jacobs. Applicant submits that independent claim 14 is not anticipated because the reference fails to teach or suggest all claim limitations. Amended independent claim 14 requires, among other limitations, first and second ends having a length and a central width, the length being longer than the central width. Nowhere does Jacobs disclose or show body 24' having first and second ends having a longer length than central width. Conversely, Jacobs describes body 24 as a plunger formed to cooperate with a tubular opening, which suggests to one of ordinary skill in the art that the plunger ends are in the shape of a circle having a uniform radius. Claim 14, as amended does not have circular dimensions matching a tube because the central width of the claimed ends must be shorter than the length. In Jacobs, the central width having circular dimensions would be equal to the length. Thus, Claim 14 is not anticipated.

Moreover, Jacobs does not make the claimed invention obvious. An object of the present invention is to act as a shim in order to direct the placement of ligaments within a bone tunnel. This goal is achievable by, among other things, providing a shim with first and second ends being substantially planar and of substantially the same configu-

ration in plan view, substantially the same size, and normal to the axis; the first and second ends having a length and a central width, the length being longer than the central width. This results in non-circular ends. Conversely, the plunger 24 of Jacobs is designed to hold a suture in place by filling a hole in a tubular body. See Col. 3, lines 25-50. One of ordinary skill in the art would not be motivated to modify the plunger of Jacobs to include non circular ends. In fact, had one made such a modification it is likely that plunger 24 would not work properly, for opening 22 would not be filled, resulting in a slack suture. Accordingly, claim 14 is not obvious.

The Examiner has rejected independent claim 14 as obvious in light of Luscombe (5,683,418). Reconsideration is requested in light of the comments below.

Luscombe relates to a suture anchor for anchoring suture material to bone. The Examiner has taken the position that the applicant's disclosure does not show the criticality of the claimed features. Applicant respectfully submits that criticality of a claimed feature is not requisite to patentability. Moreover, the Examiner's contention is misplaced. The specification clearly provides that the shim is formed and sized so as to take up additional space present at the mouth of the bone tunnel and, at the same time, to urge the ligament against the opposing side walls of the bone tunnel. By taking up such space at the mouth of the bone tunnel the problematic windshield wiper effect can be eliminated. This problem is overcome by providing a shim having, among other things, the first and second ends being substantially planar and of substantially the same configuration in plan view, substantially the same size, and normal to the axis. This feature is not disclosed in Luscombe, thus claim 1 is not obvious.

Furthermore, Luscombe teaches away from the present invention by including edges which are designed to fit into adjacent bone structure. Thus, the Luscombe structure would appear to be unsuitable for use as a shim in as much as the sharp edge, See Figs. 3 & 6, 4 in Figs. 9 and 10, and 105 in Fig. 23, which would likely cut through a shimmed ligament. Accordingly, one of ordinary skill in the art would not be

motivated to modify the device in Luscombe to include the first and second ends being substantially planar and of substantially the same configuration in plan view, substantially the same size, and normal to the axis, for such a device would likely not work properly and become fixed or anchored in a bone tunnel. Accordingly, claim 14 is not obvious.

The Examiner has rejected claim 14 as obvious in light of Kim. Applicant submits that independent claim 14 is not obvious because the reference fails to teach or suggest all the claim limitations. Independent claim 14 requires, among other things, the first and second ends being substantially planar and of substantially the same configuration in plan view, substantially the same size, and normal to the axis. Claim 14 also requires a shim hole . . . [and] body being otherwise devoid of any further opening. Nowhere, does Kim disclose these limitations. Thus, claim 14 is not anticipated by Kim.


Furthermore, as explained above, the claimed device solves the problem of a detrimental windshield wiper effect by taking up space at the mouth of the bone tunnel. This problem is overcome by providing a shim having, among other things, the first and second ends being substantially planar and of substantially the same configuration in plan view, substantially the same size, and normal to the axis. Kim does not have this configuration because Kim relates to an anchor device rather than a shim, thus Kim requires a ends having different configurations. See for example, FIGS. 1, 2, 3, & 4. Moreover, the device of Kim contains sharp edges in order to fix the anchor in place, See e.g. Fig. 4 and 9(a). Thus the Kim device would not solve the problems of the claimed invention for it would likely cut into and be detrimental to the ligament the claimed invention seeks to protect by holding in place.

Accordingly, one of ordinary skill in the art would not be motivated by Kim to make a device having first and second ends being substantially planar and of substantially the same configuration in plan view, substantially the same size, and normal to the axis, and also having only one hole, and claim 14 is not obvious.

Page 8
Serial No. 09/612,055
Response to Official Action

It is respectfully submitted that new claims 14-23, all of the claims remaining in the application, are in order for allowance, and early notice to that effect is respectfully requested.

Respectfully submitted,



Wesley W. Whitmyer, Jr., Registration No. 33,558
Michael W. Krenicky, Registration No. 45,411
Attorneys for Applicant
ST.ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, CT 06905-5619
203 324-6155